

**REMARKS**

Claims 1-16 are pending in this application. By this Amendment, claims 1-10 and 14 are amended, and claim 16 is added. Support for the amendments to the claims and for new claim 16 may be found, for example, in the original claims and in the specification at page 2, lines 11-13; page 4, line 39 to page 5, line 3; and page 5, lines 11-14 and 31-34. No new matter is added.

Entry of the amendments is proper under 37 CFR §1.116 because the amendments: (a) place the application in condition for allowance for the reasons discussed herein; (b) do not raise any new issue requiring further search and/or consideration as the amendments amplify issues previously discussed throughout prosecution; and (c) place the application in better form for appeal, should an appeal be necessary. The amendments are necessary and were not earlier presented because they are made in response to arguments raised in the final rejection. Entry of the amendments is thus respectfully requested.

In view of the foregoing amendments and following remarks, reconsideration and allowance are respectfully requested.

**I. Rejection Under 35 U.S.C. §102**

The Office Action rejects claims 1-13 under 35 U.S.C. §102(e) as anticipated by U.S. Patent No. 7,170,151 to Elpedes et al. (herein "Elpedes"). Applicants respectfully traverse the rejection.

By this Amendment, claim 1 is amended to recite that "the heat sink is constituted by the materials of the dissipating mass and of the radiator."

Elpedes discloses a device for cooling an exothermic electrical component (118) comprising a heat sink/slug (102) attached to a submount (108) by a molten solder (124). See Elpedes, column 2, lines 22-63. Elpedes fails to disclose that a submount (108) is coupled to the slug (102) by a heat sink that is constituted by the materials of the slug and the submount.

Indeed, Elpedes clearly discloses that a solder paste is deposited on a surface (104) of the slug (102) and that the submount (108) is placed on the paste. See Elpedes, column 2, lines 40-43. It is unclear whether the Office Action is asserting that the slug (102) or the solder paste is the claimed heat sink. See Office Action, page 2. However, in either case, Elpedes does not disclose that: (1) the solder paste is constituted of the slug (102) and the submount (108); or (2) the slug (102) is constituted of the submount (108). Rather, the solder paste is separate from the slug (102) and the submount (108) and thus is not constituted by the same. The slug (102) is a heat sink and thus cannot be constituted by the submount (108). Accordingly, Elpedes clearly fails to disclose a heat sink that is constituted by the materials of the slug (102) and the submount (108).

Furthermore, Elpedes does not disclose a thermal link between the slug (102) and the submount (108) "formed by an autogenous welding," as required by claim 1. Instead, Elpedes discloses that a link is formed through the solder paste that connects the slug (102) and the submount (108). See Elpedes, column 1, lines 59-60. Because the thermal link between the slug (102) and the submount (108) of Elpedes is created by a solder paste, any heat sink is not constituted by the materials of the slug (102) and submount (108) because Elpedes does not disclose using autogenous welding to form a heat sink. In contrast, the claimed heat sink is formed by autogenous welding and therefore is constituted by the materials of the dissipating mass and the radiator, which provides the claimed heat sink with conduction properties similar to those of the dissipating mass and radiator.

For at least these reasons, claim 1 would not have been anticipated by Elpedes. Claims 2-13 variously depend from claim 1 and, thus, also would not have been anticipated by Elpedes. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

**II. Rejection Under 35 U.S.C. §103**

The Office Action rejects claims 14 and 15 under 35 U.S.C. §103(a) as obvious over Elpedes in view of U.S. Patent No. 6,903,380 to Barnett et al. (herein "Barnett"). Applicants respectfully traverse the rejection.

Claims 14 and 15 variously depend from claim 1 and, therefore, contain all of the features of claim 1. The deficiencies of Elpedes with respect to claim 1 are discussed above. Barnett, which is applied by the Office Action for the additional features recited in claims 14 and 15, does not cure the deficiencies of Elpedes with respect to claim 1.

Thus, the combination of Elpedes and Barnett would not have rendered obvious claims 14 and 15. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

**III. New Claim**

By this Amendment, new claim 16 is presented. New claim 16 is directed to a "method for producing a device for cooling an exothermic electrical component" and requires that "at least one heat sink is formed between one face of the dissipation mass, called the dissipating face, and one face of the radiator, opposite to each other, by autogenous welding" (emphasis added). As discussed above, the applied references fail to teach or suggest forming a heat sink by autogenous welding. Accordingly, new claim 16 is believed to be patentable over the applied references. Prompt examination and allowance of new claim 16 are respectfully requested.

**IV. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the application are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



William P. Berridge  
Registration No. 30,024

Matthew C. Barthalow  
Registration No. 60,323

WPB:MCB/csm

Attachment:  
Petition for Extension of Time

Date: March 30, 2009

**OLIFF & BERRIDGE, PLC**  
**P.O. Box 320850**  
**Alexandria, Virginia 22320-4850**  
**Telephone: (703) 836-6400**

<p>DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>
--